1: J Clin Microbiol 1999 Mar;37(3):615-619 Related Articles, Books, LinkC

Improved silica-guanidiniumthiocyanate DNA isolation procedure based on selective binding of bovine alpha-casein to silica particles.

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DNA purified from clinical cerebrospinal fluid and urine specimens by a silica-guanidiniumthiocyanate procedure frequently contained an inhibitor(s) of DNA-processing enzymes which may have been introduced by the purification procedure itself. Inhibition could be relieved by the use of a novel lysis buffer containing alpha-casein. When the novel lysis buffer was used, alpha-casein was bound by the silica particles in the first step of the procedure and eluted together w DNA in the last step, after which it exerted its beneficial effects for DNA-processi enzymes. In the present study we have compared the novel lysis buffer with the previously described lysis buffer with respect to double-stranded DNA yield (whic was nearly 100%) and the performance of DNA-processing enzymes.

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